

Amendments to the Claims:

1 1. (previously presented) A method of efficiently transmitting media information
2 associated with two or more concurrent calls carried in a packet-switched network, the
3 method comprising the computer-implemented steps of:
4 aggregating two or more media packets from the two or more concurrent calls
5 originating from one or more source end points into an aggregated media
6 payload;
7 re-packetizing the aggregated media payload using a single aggregated header to form
8 an aggregated media packet;
9 forwarding the aggregated media packet to a next hop in the packet-switched network
10 in response to either one of
11 (a) a timer reaching a non-zero maximum allowed delay time value, or
12 (b) the aggregated media packet containing a specified number of Real-Time
13 Protocol segments, wherein the specified number is variable according
14 to user input.

1 2. (previously presented) The method of Claim 15, further comprising de-aggregating the
2 aggregated media payload for one or more destination endpoints by separating the
3 aggregated media payload to result in creating and sending restored copies of the two
4 or more media packets, wherein each media packet corresponds to one of the two or
5 more concurrent calls.

1 3. (previously presented) The method of Claim 15, wherein aggregating the two or more
2 media packets comprises compressing one or more headers of each media packet.

1 4. (original) The method of Claim 1, wherein the two or more media packets are Real-
2 Time Protocol (RTP) packets.

1 5. (previously presented) The method of Claim 15, wherein the step of aggregating two
2 or more media packets further comprises the steps of:
3 compressing an IP header and a UDP header of each RTP packet to form a
4 corresponding uncompressed RTP segment; and
5 encapsulating the two or more uncompressed RTP segments with the single
6 aggregated header.

1 6. (previously presented) The method of Claim 21, wherein the step of aggregating two
2 or more media packets further comprises the steps of:
3 compressing an IP header, a UDP header, and an RTP header of each RTP packet to
4 form a corresponding compressed RTP segment; and
5 encapsulating the two or more compressed RTP segments with the single aggregated
6 header.

1 7. (previously presented) The method of Claim 1, wherein the step of aggregating the
2 two or more media packets further comprises forming the aggregated media payload
3 according to an aggregation protocol for aggregating the two or more media packets.

1 8. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a version field indicating a version of the aggregation protocol.

- 1 9. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a placeholder field that reserves packet space for future use.
- 1 10. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a sequence number field that is incremented for each aggregated
5 media packet and is used to detect media packet loss.
- 1 11. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 comprises forming the aggregated media payload based on an aggregated media
3 packet format for each aggregated media packet wherein the aggregated media packet
4 format comprises a trunk ID field that uniquely identifies a corresponding trunk.
- 1 12. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that comprises a context ID field indicating
5 a session context ID for the uncompressed Real-Time Protocol segment.
- 1 13. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol

segment of the two or more media packets that comprises a compression bit indicating whether the uncompressed Real-Time Protocol segment is uncompressed.

14. (previously presented) The method of Claim 15, wherein the aggregation protocol further comprises forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time Protocol segment of the two or more media packets that comprises a placeholder field for future use.

15. (currently amended) A method of efficiently transmitting media information associated with two or more concurrent calls carried in a packet-switched network, the method comprising the computer-implemented steps of:

- aggregating, according to an aggregation protocol, two or more media packets from the two or more concurrent calls originating from one or more source end points into an aggregated media payload;
- re-packetizing the aggregated media payload using a single aggregated header to form an aggregated media packet;
- forwarding the aggregated media packet to a next hop in the packet-switched network;

wherein the aggregation protocol further comprises forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time Protocol segment of the two or more media packets, ~~wherein the aggregated media payload~~ that comprises a Real-Time Protocol header extension bit indicating whether a Real-Time Protocol header extension appears in the uncompressed Real-Time Protocol segment.

- 1 16. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that includes a full length field containing a
5 length of a Real-Time Protocol packet that corresponds to the uncompressed Real-
6 Time Protocol segment.
- 1 17. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that comprises a Real-Time Protocol
5 payload and a Real-Time Protocol header corresponding to a Real-Time Protocol
6 packet that in turn corresponds to the uncompressed Real-Time Protocol segment.
- 1 18. (previously presented) The method of Claim 15, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on an uncompressed
3 Real-Time Protocol segment format for each uncompressed Real-Time Protocol
4 segment of the two or more media packets that comprises a padding field that aligns
5 an end of the uncompressed Real-Time Protocol segment with a next four-byte
6 boundary.
- 1 19. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of

the two or more media packets that comprises a context ID field indicating a session context ID for the compressed Real-Time Protocol segment.

20. (previously presented) The method of Claim 21, wherein the aggregation protocol further comprises forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each compressed Real-Time Protocol segment of the two or more media packets that comprises a compression bit indicating whether the Real-Time Protocol segment is compressed.

21. (currently amended) A method of efficiently transmitting media information associated with two or more concurrent calls carried in a packet-switched network, the method comprising the computer-implemented steps of:

aggregating, according to an aggregation protocol, two or more media packets from

the two or more concurrent calls originating from one or more source end

points into an aggregated media payload;

re-packetizing the aggregated media payload using a single aggregated header to form an aggregated media packet;

forwarding the aggregated media packet to a next hop in the packet-switched network;

wherein the aggregation protocol further comprises forming the aggregated media

payload based on a compressed Real-Time Protocol segment format for each

compressed Real-Time Protocol segment of the two or more media packets;

~~wherein the aggregated media payload~~ that comprises a Real-Time Protocol

header extension bit indicating whether a Real-Time Protocol header extension

appears in the compressed Real-Time Protocol segment.

1 22. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a Real-Time Protocol header marker
5 bit.

1 23. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a length field containing a length of a
5 Real-Time Protocol payload of a Real-Time Protocol packet of the compressed Real-
6 Time Protocol segment.

1 24. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a sequence number field carrying a
5 Real-Time Protocol header sequence number.

1 25. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment
4 wherein the compressed Real-Time Protocol segment format comprises a timestamp
5 field carrying a Real-Time Protocol header timestamp.

1 26. (original) The method of Claim 7, wherein the aggregation protocol further comprises
2 forming the aggregated media payload based on a compressed Real-Time Protocol
3 segment format for each compressed Real-Time Protocol segment of the two or more
4 media packets that comprises a Real-Time Protocol payload of a Real-Time Protocol
5 packet that corresponds to the compressed Real-Time Protocol segment.

1 27. (previously presented) The method of Claim 21, wherein the aggregation protocol
2 further comprises forming the aggregated media payload based on a compressed Real-
3 Time Protocol segment format for each compressed Real-Time Protocol segment of
4 the two or more media packets that comprises a padding field that aligns an end of the
5 compressed Real-Time Protocol segment with a next boundary.

1 28. (original) The method of Claim 1, wherein the two or more media packets are
2 received while traversing a common sub-route.

1 29. (canceled)

1 30. (canceled)

1 31. (previously presented) A method of efficiently transmitting media information
2 associated with two or more concurrent calls carried in a packet-switched network, the
3 method comprising the computer-implemented steps of:
4 aggregating two or more media packets from the two or more concurrent calls
5 originating from one or more source end points into an aggregated media
6 payload;

re-packetizing the aggregated media payload using a single aggregated header to form
an aggregated media packet;
forwarding the aggregated media packet to a next hop in the packet-switched network
when a non-zero maximum allowed delay time value is reached.

32. (previously presented) The method of Claim 1, further comprising:
using the maximum allowed delay time value for forwarding the aggregated media
packet;
starting a count down for the maximum allowed delay time value when a first media
packet arrives for aggregation; and
aggregating subsequent media packets that arrive before the maximum allowed delay
time value is reached.

33. (previously presented) An apparatus for transmitting media information associated
with two or more concurrent calls carried in a packet-switched network, the apparatus
comprising:
means for aggregating two or more media packets from one or more source endpoints
into an aggregated media payload;
means for re-packetizing the aggregated media payload using a single aggregated
header to form an aggregated media packet; and
means for forwarding the aggregated media packet to a next hop in the packet-
switched network in response to either one of
(a) a timer reaching a non-zero maximum allowed delay time value, or

11 (b) the aggregated media packet containing a specified number of Real-Time
12 Protocol segments, wherein the specified number is variable according
13 to user input.

- 1 34. (previously presented) An apparatus for transmitting media information associated
2 with two or more concurrent calls carried in a packet-switched network, the apparatus
3 comprising:
4 one or more processors coupled to an aggregator for aggregating two or more media
5 packets into an aggregated media packet;
6 a memory accessible to the one or more processors; and
7 one or more sequences of instructions stored in the memory which, when executed by
8 the one or more processors, cause the one or more processors to carry out the
9 steps of:
10 aggregating two or more media packets from one or more source endpoints
11 into an aggregated media payload;
12 re-packetizing the aggregated media payload using a single aggregated header
13 to form the aggregated media packet; and
14 forwarding the aggregated media packet to a next hop in the packet-switched
15 network in response to either one of
16 (a) a timer reaching a non-zero maximum allowed delay time value, or
17 (b) the aggregated media packet containing a specified number of Real-
18 Time Protocol segments, wherein the specified number is
19 variable according to user input.

- 1 35. (previously presented) A computer-readable medium comprising one or more
2 sequences of instructions for efficiently transmitting media information associated
3 with two or more concurrent calls carried in a packet-switched network, which the
4 sequences of instructions, when executed by one or more processors, cause the one or
5 more processors to carry out the steps of:
6 aggregating two or more media packets from the two or more concurrent calls
7 originating from one or more source end points into an aggregated media
8 payload;
9 re-packetizing the aggregated media payload using a single aggregated header to form
10 an aggregated media packet;
11 forwarding the aggregated media packet to a next hop in the packet-switched network
12 in response to either one of
13 (a) a timer reaching a non-zero maximum allowed delay time value, or
14 (b) the aggregated media packet containing a specified number of Real-Time
15 Protocol segments, wherein the specified number is variable according
16 to user input.